# Bay Area Express Lanes Application to the CTC

**Commission Briefing** 

September 15, 2011

#### Why Bay Area Express Lanes?

- Improve mobility for carpoolers, express bus riders and motorists willing to pay
- Build on solid foundation of 420 miles of existing HOV lanes
- Generate new source of toll revenue at time of constrained federal and state budgets

## CTC Application – The "Wishbone"



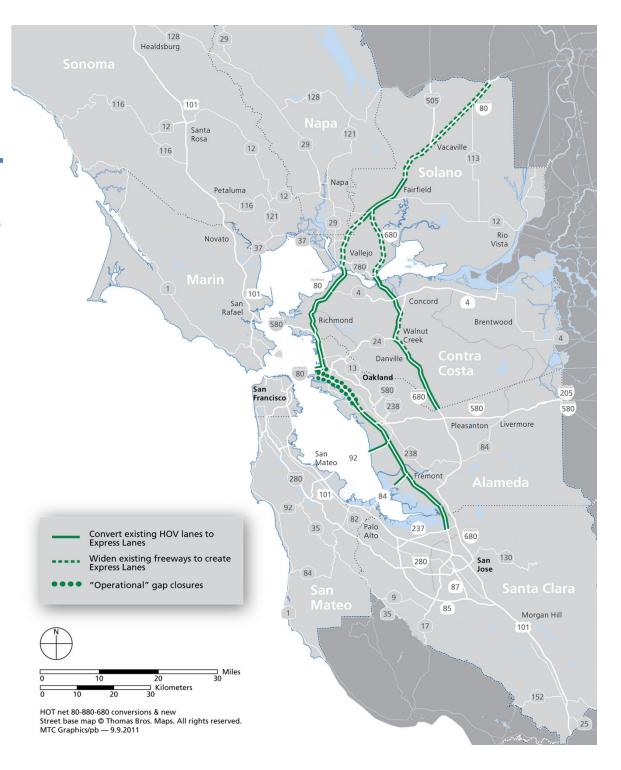
## **CTC Application – Component Parts**

#### 290 miles

✓ Conversions: 150 miles

✓ New lanes: 120 miles

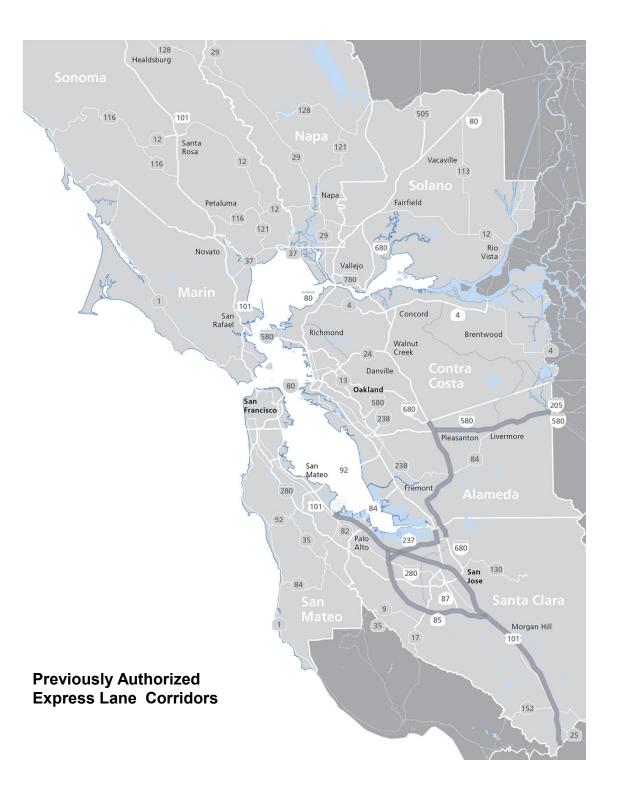
✓ Operational gap closure:20 miles



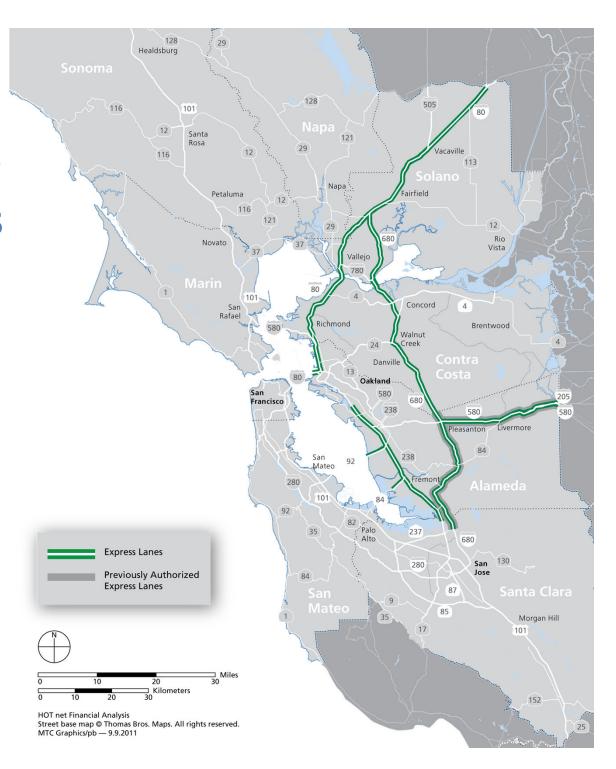
#### Previously Authorized Corridors

#### 280 miles

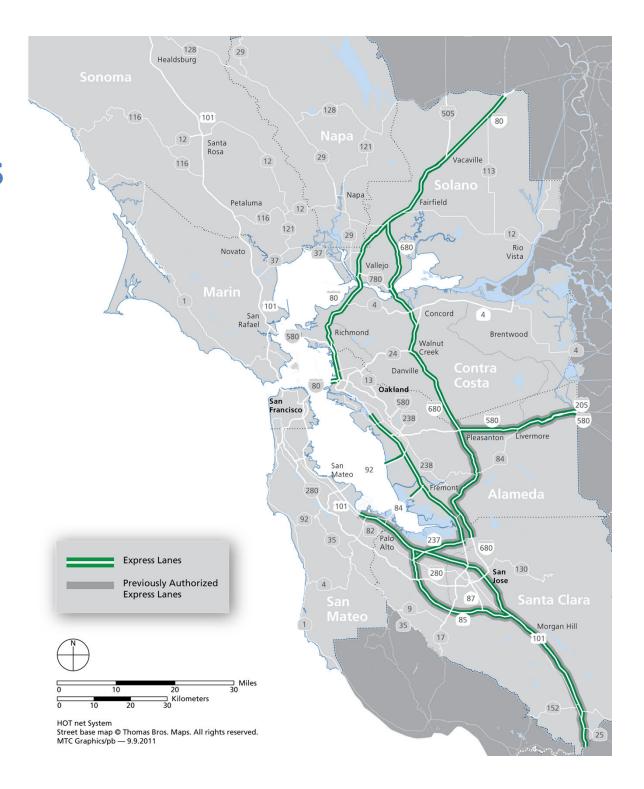
- ✓ Ala-680 SB Sunol Grade already in operation
- √ 237/880 operational early 2012



## **CTC Application – Financial Analysis**



#### Regional Express Lane Network



# Regional Express Lane Network Mileage

	Directional Miles		
	Previously Authorized <sup>1</sup>	New Authority	Total
Convert existing HOV lanes to express lanes <sup>2</sup>	190	150	340
Widen existing freeways to create express lanes	90	120	210
Operational gap closure	0	20	20
Total	280	290	570

<sup>&</sup>lt;sup>1</sup> In both Alameda and Santa Clara counties

<sup>&</sup>lt;sup>2</sup> Includes existing I-680 Sunol Express Lane (14 miles)

### **Financial Feasibility Envelope**

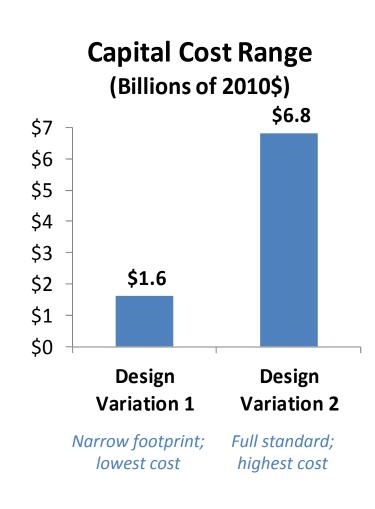


- Low traffic demand
- Less tolling (e.g., HOV2+ indefinitely, peak periods only, lower toll rates)

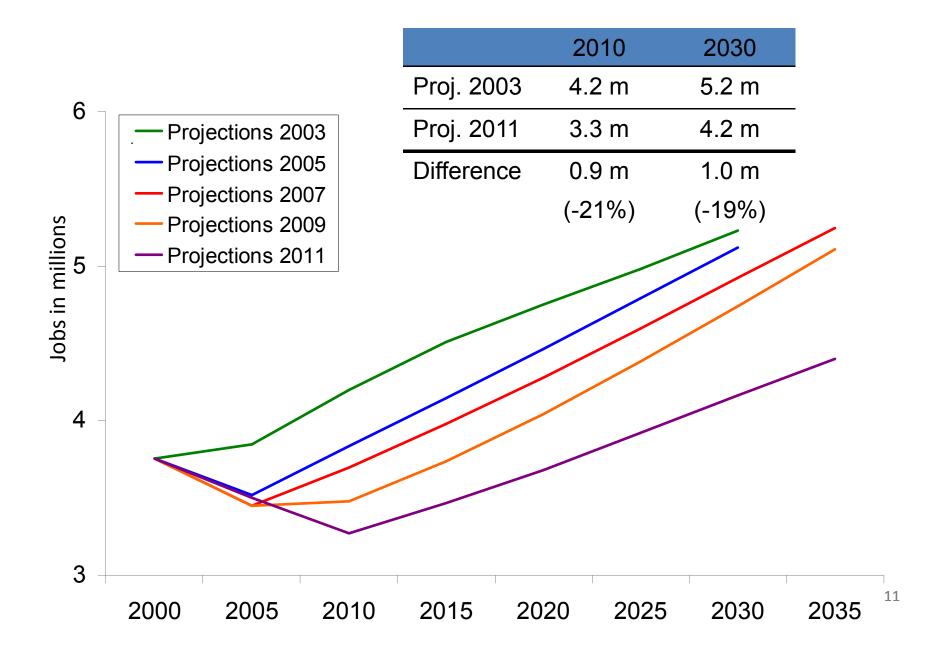
- High traffic demand
  - More tolling (e.g., HOV3+ upon opening, 24/7 tolling, higher toll rates)

## Project Study Report Establishes Engineering Feasibility and Cost Range

- Substantial level of detail:
  - Each corridor analyzed in 1/5<sup>th</sup> mile segments
  - Unit cost data averaged from active and planned express lane projects
- Caltrans HOV guidelines used to prioritize lane & shoulder reductions
- O&M cost from active and planned express lane facilities
- Frequent CHP enforcement areas, video license plate detection & violations processing
- 40% contingency factor applied to capital cost, 25% contingency to O&M cost

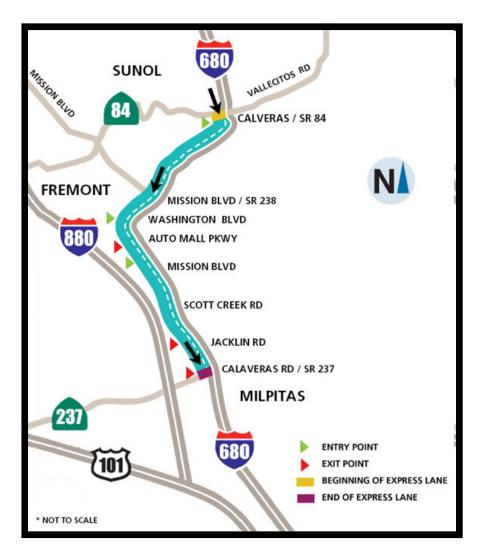


### **Regional Job Projections**

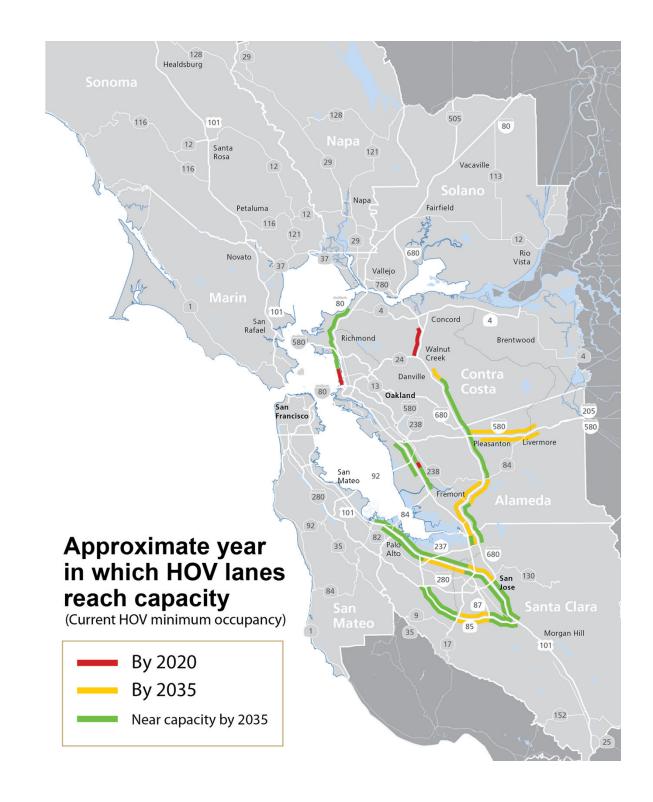


## I-680 Sunol Southbound Express Lane

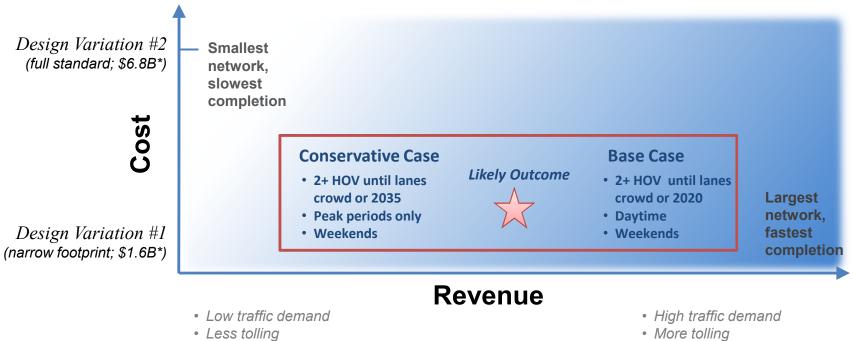
- Opened September 2010
- Below original financial projections; FY 10-11 revenue = \$660,000 (9 months)
- Test case for access, signage, communications, enforcement
- Violation rates exceed 30%
- Average tolls
  - Peak period: \$2.97
  - Off-peak: \$0.50



## When Do HOV Lanes Fill Up?



## "Bookends" for Financial Analysis in Application



 Less tolling (e.g., HOV2+ indefinitely, peak periods only, lower toll rates)

- More tolling (e.g., HOV3+ upon opening, 24/7 tolling, higher toll rates)
- Financial analysis cases, expressed as tolling policy scenarios, provide an envelope for variations in other factors including costs and financing terms.
- Implementation of specific tolling policies would be subject to future MTC Commission actions, in consultation with regional partners.
- Emphasizes need to contain costs within Caltrans design assumptions.

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#### **Financial Summary**

#### Total amounts through 2040 (millions of inflated dollars)

	Base Case	<b>Conservative Case</b>
Express Lane Toll Revenue	6,500	4,400
Debt Proceeds (Bonds/TIFIA)	2,100	2,400
Local Funding	100	100
Grant Funding	400	800
Capital Costs	(3,000)	(3,600)
Operations, Maintenance and Rehabilitation	(1,500)	(1,300)
Debt Service	(3,400)	(2,300)
Other*	100	100
Potential Net Revenue**	1,300	600

<sup>\*</sup> Other includes financing fees, reserves funding/releases and interest income

<sup>\*\*</sup> These potential surpluses emerge in the later years (after completion of the Network), and due to their bottom-line nature, are highly sensitive to variations in toll policy, revenue, cost, schedule and financing assumptions.

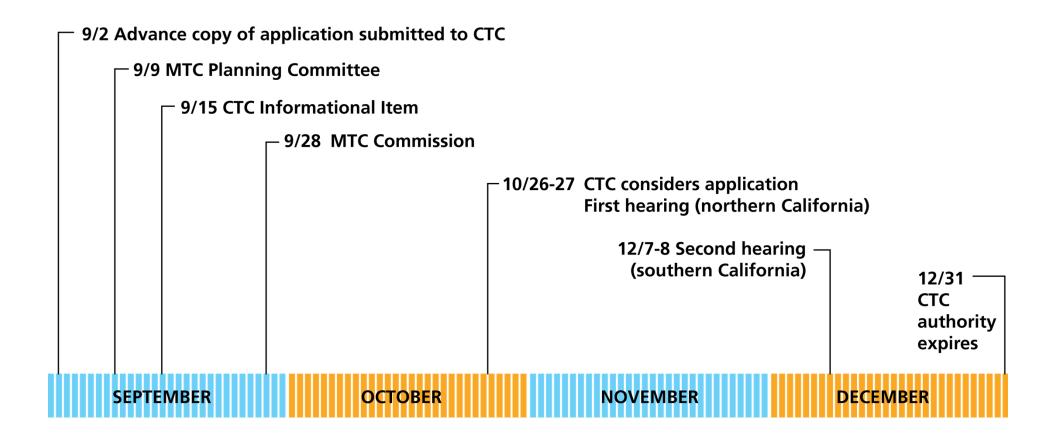


			Rosa 12 29 Solano
Route	Peak Hour Bus Trips (current service)	Bus Rider Hours Saved	Petaluma  12  Fairfield  116  121  29  Novato  37  Novato  37  12  Rio Vista
A. I-80 Yolo County to I-505	4	90	Marin  San Rafael  Richmond  Refres  Richmond  Refres  Richmond  Refres  Richmond
<b>B.</b> I-80 I-505 to Carquinez Bridge	40	840	Bus Service on Express Lanes  S80  Danville Contra Costa  F
<b>C.</b> I-680 Gold Hill Rd. to I-780	4	50	System  San Francisco  Daily Express  Pleassoon Livermore  San Francisco  Hayward  Pleassoon Livermore
<b>D.</b> I-680 Route 242 to North Main St.	40	70	Fewer than 20 20–200 More than 200
E. I-680 Alcosta Blvd. to SR 237	4	80	Convert existing, or phased and fully funded HOV lanes to express lanes  Add new express lanes
<b>F.</b> I-580 Greenville to San Joaqin County	40	360	Operational gap closures  San Mateo  San Morgan Hill
<b>G.</b> I-880 Hegenberger to Lewelling	30	90	0 10 20 30 Miles
TOTAL		1,580	0 10 20 30 Kilometers  Street base map © Thomas Bros. Maps. All rights reserved.  MTC Graphics/pb — 9.1.2011

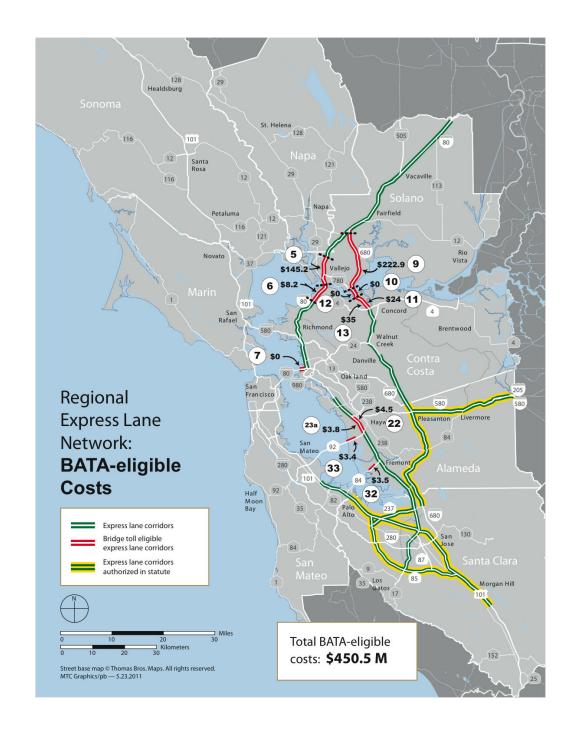
#### **Getting Authority is Just the First Step**

- Additional steps required to establish the network include:
  - Establish final Express Lane Network in Plan Bay Area
  - Conduct detailed analyses of revenue, toll policy, financing
  - Develop policies for public input and agency consultation
  - Explore delivery approaches and assign responsibilities
- Policies will be established for public input and consultation with Caltrans, CHP, and the CMAs prior to making these major policy decisions.

#### **Schedule for CTC Approval**

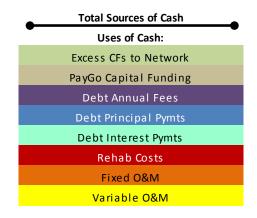


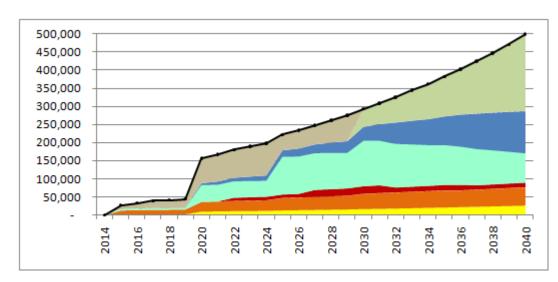
# Segments eligible for BATA funding



## **Operating Network Cash-Flow**







#### Case





